EXHIBIT I

I. INTRODUCTION

I, Deborah Mash, have been retained as an expert consultant on behalf of the Defendant, West Warwick Police Department in the case of *Petro/Jackson v. Town of West Warwick.* I have been asked to provide my opinions regarding Mr. Mark Jackson and the circumstances surrounding his manner of death.

The opinions and facts contained in this statement are based on information made available to me in this case on or before the date of this report, as well as from the perspective of over 25 years of professional experience in the study of neurochemistry and pathology or drug abuse and sudden death. I reserve the right to supplement or modify this statement if and when I acquire additional relevant information prior to the time of trial.

II. BACKGROUND AND QUALIFICATIONS

I earned a Bachelor of Arts Degree with special honors in Experimental Psychology from Florida State University and a Ph.D. in Pharmacology (Neuropharmacology) from the University of Miami, School of Medicine. I completed postdoctoral training in the Department of Neurology, Harvard Medical School, Beth Israel Hospital. I am a tenured Professor of Neurology and Molecular and Cellular Pharmacology at the University of Miami. I have served as a consultant to university, state and federal agencies. I serve as the Director of the University of Miami Brain Endowment Bank, which houses the largest collection of autopsies specimens from excited delirium and sudden death. I frequently assist the courts with matters pertaining to criminal forensic investigations dealing with illicit drugs and alcohol. My research program at the University is funded by federal grants from the United States Public Health Service National

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Institute on Drug Abuse to investigate the effects of drugs and alcohol on the human brain and behavior. I hold four patents for medication development for the treatment of drug and alcohol addictions. A list of peer reviewed publications and monographs are included in my curriculum vita. I have served as an expert in pharmacology and toxicology in courts in Florida, California, Delaware, Oklahoma, Louisiana, Illinois and Pennsylvania.

III. MATERIALS CONSIDERED IN FORMING MY OPINIONS

My opinions set forth in this report are based on my consideration of the following materials:

1. The medical records and psychiatric reports;
2. The Rhode Island Office of Medical Examiner autopsy and toxicology reports and photographs;
3. West Warwick Police Department Report 6/27/08; Transcript of Recorded Calls/Transmissions
4. West Warwick Police Department In Custody Death Internal Review
5. Rhode Island State Police Narrative for Corporal Shari Russell.
6. Witness Statements
7. Defendant statements and deposition transcripts: Officers Kelley, Lukowitz, T. Nye, Palazzo, Thornton, M. Nye and Dispatcher Rachel Pineda.
8. Plaintiff's discovery responses (request for production and supplemental requests)
9. Deposition transcripts (Defendants, Juanita Jackson, Karen Petro)
10. Deposition transcripts (Fire Rescue respondents, James Croft, Christopher Cahoon).

IV. BACKGROUND

The following is a summary of the facts of the case that are relevant. Mr. Mark Jackson was a white male, 47 years of age. At the time of his death, he weighed 259 pounds and was 74 inches. Of particular relevance to this matter is his history of psychotic behavior and diagnosis of schizophrenia.

On Friday, June 27, 2008, at approximately 11:00 PM Karen Warfield contacted West Warwick Police Department (WWPD) through a 911 call. She stated that there were some boys vandalizing the business sign in front of Joyal's Liquor store.

Officers were dispatched to the scene to investigate. Officers Patrick Kelley and Sean Lukowicz were first to arrive on the scene. Upon arrival, there were no people in the front of the store, but Officer Kelly found a white male loitering in the back of the building. The Officer asked the male to remove his hands from his pockets, but the male – Mark Jackson – did not comply with verbal commands. The Officers approached him the subject and a struggle ensued. During this struggle, Mr. Jackson was sprayed with Oleoresin Capsicum (OC) and received baton strikes to the legs, neither of which had any effect on the subject. At this time, Officers Nye, Palazzo and Nye responded to the scene and assisted in getting Mr. Jackson handcuffed and transferred to the rear of the police car. Officer Lukowicz transported Mr. Jackson to police headquarters and was met by the other Officers. When the Officers attempted to remove him from the police vehicle, they noted that he was unresponsive and unconscious. The Officers removed Mr. Jackson from the car and began CPR. Also, a request was made to West Warkwick Fire Department to assist. Unfortunately, the attempts to revive Mr. Jackson were not successful. He was transported to Kent County Hospital where he was pronounced dead shortly thereafter.

Mr. Jackson was found to be in a disoriented and delusional state by the Officers on the scene, nonresponsive to their verbal commands. He was combative which necessitated additional use of force. Mr. Jackson received baton strikes to the legs and OC spray. However, he was not responsive to either of these pain control devices and he continued to struggle and act out in a bizarre manner.

Officers and witnesses reported that the OC Spray and baton strikes had no effect on Mr. Jackson. The two Officers who were first responders were joined by back up Officers who assisted in this situation. Mr. Jackson was very agitated and continued to struggle and escalate the violence impervious to pain control measures. He continued to struggle with both Officers and it was not until additional officers arrived that they were able to place him in handcuffs and move him into the police vehicle for transport. Mr. Jackson was reportedly speaking with the Officers when he was moved into the police vehicle. Mt. Jackson continued to struggle with the Officers the entire time although he refused to give them his name. Witness statements confirm these events and attest the bizarre nature of the interaction between Mr. Jackson and the Officers.

Assistant Medical Examiner Peter A. Gillespie performed the autopsy on June 30, 2010, almost three days after his death. He was found to have minor abrasions and several bruises consistent with baton strikes to the body. Toxicological examination in urine was negative for common drugs of abuse. Chest blood was negative for basic drugs and alcohol. The autopsy findings were notable for ischemic heart disease with atherosclerosis (moderate) and cardiomegaly, obesity with fatty liver, and chronic pancreatitis. The cause of death was sudden death complicating ischemic heart disease following physical altercation with the police in a schizophrenic person and the manner of death was homicide. Postmortem toxicology was non-contributory.

V. OPINIONS

The following statements are my opinions to a reasonable degree of medical, scientific, and professional certainty based on my review of the autopsy findings, forensic investigation, toxicology results, witness statements and available medical records Massachusetts General Hospital.

Mr. Jackson was in an agitated and psychotic state when police officers were called to the scene. He had a history of mental disorders, which were documented in medical records and disability reports. He had become disable after a car accident in 1979 and never was able to return to any type of employment. He reportedly had a history of visual hallucinations and chronic headaches. He first received a diagnosis of PTSD and later schizophrenia by Dr. Frederick Evans. His family history is positive for alcoholism. He was prescribed antipsychotic medications, including Stelazine and Respirdal. He was non-compliant with medications and he only sought medical evaluations to maintain his disability payments.

Police were called to the scene because someone was vandalizing a sign at a local liquor store. Mr. Jackson demonstrated paranoid, violent, and aggressive behaviors that were unremitting. He was impervious to pain control measures and he failed to respond to verbal commands. He demonstrated extreme strength requiring the assistance of five Officers at the scene. The behavior of Mr. Jackson was consistent with an acute onset of excited delirium. These behaviors include bizarre and/or aggressive behavior, shouting, paranoia, panic, violence toward others, and unexpected physical strength.

There are some inconsistencies regarding past or present drug and alcohol use. However, Mr. Jackson had evidence of chronic pancreatitis at autopsy. Heavy alcohol use over many years is a leading cause of chronic pancreatitis.

VI. DID THE DECEDENT'S PRIOR PSYCHIATRIC HISTORY CONTRIBUTE TO HIM DEVELOPING EXCITED DELIRIUM THAT LEADS TO CIRCUMSTANCS SURROUNDING HIS DEATH?

People experiencing excited delirium display sudden onset of paranoia and alternate between calm behavior and extreme agitation. When confronted by police, who are invariably called to the scene, the person intensifies the violence and paranoia. An intense struggle ensues, when the person exhibits incredible "superhuman" strength and is impervious to the usual police techniques of pain control, including pepper spray, electric stun guns, and baton strikes (Ross, 1998; Stratton et al., 2001; Wetli and Natarajan, 2005; Grant et al., 2009). The intense struggle requires the efforts of many police officers, who are finally able to restrain the person and apply restraints. These cases usually occur in large men who have an increased body mass index (BMI). Case reviews demonstrate that the individual is medically unstable and in a rapidly declining state that has a high risk of mortality even with medical intervention or in the absence of restraint stress, OC Pepper Spray or Taser deployment (US NIJ Special Report, 2008).

These individuals develop a disturbance in thought, behavior and mood, and become agitated and violent consistent with a CNS mechanism or brain disorder. An increased sensitivity to stress associated with noradrenergic hyperactivity due to the increased dopaminergic activity is part of the cascade of abnormal neurochemical changes (Dolinak and Matshes, 2005; Lather and Schraeder, 2006). In hyperactive delirium, there is a change in awareness and response to the environment, which manifests as agitation, hallucinations, delusions, and a psychosis. Over one hundred fifty years ago, Dr. Luther Bell (Bell's Mania or Acute Delirium) described a disease in institutionalized unmedicated psychiatric patients resembling some advanced stage of mania and fever as an overlooked and often fatal malady. The early description of this syndrome in the psychiatric literature consistently describes the

extreme mania and the lack of any significant findings on autopsy.

We have determined in a large cohort of acute excited delirium victims that there is a defect in the regulation of the dopamine signaling molecules (Mash et al., 2002; see also Mash et al., 2009). The disturbance in the neurotransmitter dopamine and the "hyperdopaminergic" state leads to psychosis and violent behavior in these subjects (Davis et al., 1986). The role of abnormal dopamine and dopamine receptors in Schizophrenia is intertwined with the pharmacology of antipsychotic medications. The first antipsychotic, chlorpromazine (Thorazine), showed that within three days, chlorpromazine alleviated hallucinations and stopped internal "voices" in eight psychotically disturbed patients. The rapid onset of antipsychotic action within days is consistent with a brain receptor target blocking the action of dopamine for the antipsychotics (Kapur et al., 2005; Agid et al., 2006). It is my opinion that Mr. Jackson suffered from acute excited delirium. He was at risk for this disorder because he was an unmedicated schizophrenic patient. He evidenced all of the behavioral changes consistently seen in cases of agitated delirium with a fatal outcome. He had previously been diagnosed with Schizophrenia and it is uncertain why he was not medicated or if he was noncompliant on medications. His family members stated that he was not under the care of a treating psychiatrist prior to his death and toxicology testing failed to show any antipsychotic medications in his blood or urine.

The mechanism of death in these cases is not well understood but definitely involves a dysfunction of the autonomic nervous system. One contributing cause of death in this matter is the decedent's cardiac findings of hypertrophy and coronary atherosclerosis. The risk of sudden cardiac death, particularly in the presence of cardiac disease such as hypertrophy and dilatation, is increased in unmedicated schizophrenics. Life expectancy of schizophrenic patients was reported to be 20% shorter than general population. This reduced life expectancy is mainly caused by cardiovascular events such as sudden cardiac death. For these patients a higher heart

rate, reduced vagal control and reduced complexity of different heart rate variability indices is reported. The heart rate and blood pressure time series are influenced by different regulatory systems and connected by complex interactions of the autonomic nervous control system (ANS). In patients with acute schizophrenia (medicated and unmedicated) this regulatory control system is assumed to be highly affected and thus of clinical importance in connection with the high mortality rates in these patients. Since dopamine in the brain is elevated in limbic brain areas that are the higher command relays for brain control of cardiac rate and rhythm, the syndrome of excited delirium would have put Mr. Jackson at extreme risk for the development of a fatal arrhythmia. His extreme paranoia and agitation were caused by abnormal neurotransmitter levels in brain and the neuroadaptive changes that are known to occur in individuals who have not been medicated for this condition. If Mr. Jackson also abused alcohol on a regular basis, this would have contributed to the emergence of the syndrome, increasing his risk for a fatal outcome.

Exhibits to be used

Exhibits to be used in my testimony include the material referenced in Exhibit A of this report, charts and tests shown in the exhibits to this report, as well as compilations or summaries, claim charts, or other supporting materials.

Conclusion

Based on my review of the information provided to me in this matter, as well as my professional education, experience and background, it is also my opinion to a reasonable degree of medical probability that Mr. Jackson was in a state of excited delirium on June 27, 2008. Most individuals who experience excited delirium die at the scene or in immediate police custody or shortly thereafter despite medical intervention. Those who do survive usually evidence subsequent metabolic, respiratory, hepatic, renal and cardiac failure. Mr. Jackson was

at risk for fatal excited delirium because of the lack of proper medication and follow up care for his underlying psychiatric disease.

VII. REFERENCES

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VIII. ATTACHMENTS:

Curriculum Vitae 2010

List of Past Expert Testimony

IX. COMPENSATION FOR PROFESSIONAL SERVICES:

The hourly fee for this service is $250.00. My fee for travel related services is billed at a fixed portal rate of 2,000.00 per day portal to portal. Depositions and court appearances will be billed at the same rate as stated above.

This 28th day of June, 2010.

Deborah C. Mash, Ph.D.